

CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A base station comprising:
a transceiver subsystem; and
a processing subsystem;
wherein the processing subsystem is configured to receive a request for service including
an identification of a specific service class from a mobile station and to make a
determination whether or not to issue a grant to the mobile station in response to
the request for grant,
and if the processing subsystem makes a determination to issue the grant, the processing
subsystem is configured to identify in the issued grant a specific service class for
which the grant is issued, the specific service class associated with data to be
transmitted on a reverse link from the mobile station to the base station.
2. (Original) The base station of claim 1, wherein the processing subsystem is
configured to make the determination independently of a base station controller.
3. (Original) The base station of claim 1, wherein the processing subsystem is
configured to make the determination independently of one or more additional base stations.
4. (Original) The base station of claim 1, wherein the determination is made at the
medium access control layer.
5. (Original) The base station of claim 1, wherein if the processing subsystem
determines that the grant should be issued to the mobile station, the base station is configured to
issue the grant.
6. (Original) The base station of claim 5, wherein the processing subsystem is
configured to identify the mobile station in the grant.

7. (Original) The base station of claim 5, wherein the processing subsystem is configured to issue the grant as an individual grant.
8. (Original) The base station of claim 7, wherein the processing subsystem is configured to identify in the individual grant a specific service class for which the individual grant is issued.
9. (Original) The base station of claim 5, wherein the processing subsystem is configured to issue the grant as a common grant.
10. (Original) The base station of claim 9, wherein the processing subsystem is configured to identify in the common grant a specific service class for which the common grant is issued.
11. (Original) The base station of claim 5, wherein the processing subsystem is configured to issue at least one individual grant and at least one common grant.
12. (Currently Amended) A mobile station comprising:
a transceiver subsystem; and
a processing subsystem coupled to the transceiver subsystem and configured to process information received from the transceiver subsystem and to generate information to be transmitted by the transceiver subsystem;
wherein the processing subsystem is configured to generate a request for transmission to a base station, to identify a corresponding grant received from the base station, and to control the transceiver subsystem to transmit data according to the received grant; and
wherein the request for transmission to the base station specifies one of a set of available classes of service, the one available class of service associated with data to be transmitted on a reverse link from the mobile station to the base station.

13. (Original) The mobile station of claim 12, further comprising one or more buffers, wherein each buffer is associated with one of the classes of service.

14. (Original) The mobile station of claim 13, wherein the processing subsystem is configured to monitor the buffers and, for each buffer, to generate a transmission request if a threshold amount of data is detected in the buffer.

15. (Original) The mobile station of claim 14, wherein the request specifies the class of service associated with the buffer and the amount of data in the buffer.

16. (Canceled)

17. (Original) The mobile station of claim 12, wherein the processing subsystem is configured to identify a maximum supportable T/P ratio in the request.

18. (Original) The mobile station of claim 17, wherein the processing subsystem is configured to generate feedback while transmitting under a grant, wherein the feedback indicates changes in the maximum supportable T/P ratio.

19. (Original) The mobile station of claim 12, wherein the processing subsystem is configured to generate one or more additional requests for service for transmission to the base station if no grant is received in response to a previous request.

20. (Original) The mobile station of claim 12, wherein if no grant is received from the base station in response to a request, the processing subsystem is configured to autonomously transmit data to the base station.

21 - 34. (Canceled)

35. (Currently Amended) A method for a base station comprising:
receiving a request for a grant including an identification of a specific service class from a
mobile station at a- the base station;
processing the request at the base station; and
determining at the base station whether to issue the grant;
and if the grant is issued to the mobile station, identifying in the issued grant a specific
service class for which the grant is issued, the specific service class associated
with data to be transmitted on a reverse link from the mobile station to the base
station.
36. (Original) The method of claim 35, further comprising issuing the grant if the base station determines that the grant should be issued.
37. (Original) The method of claim 36, further comprising issuing the grant as an individual grant.
38. (Original) The method of claim 37, further comprising identifying a mobile station in the grant.
39. (Original) The method of claim 38, further comprising identifying a specific service class in the grant.
40. (Original) The method of claim 36, further comprising issuing the grant as a common grant.
41. (Original) The method of claim 40, further comprising identifying a specific service class in the grant.

42. (Original) The method of claim 36, further comprising issuing at least one individual grant and at least one common grant.
43. (Original) The method of claim 35, wherein determining whether to issue the service grant is performed without communicating with a base station controller.
44. (Original) The method of claim 43, wherein determining whether to issue the service grant is performed without communicating with one or more additional base stations.
45. (Original) The method of claim 35, wherein determining whether to issue the service grant is performed at a medium access layer.
46. (Original) The method of claim 35, further comprising: transmitting a request for a grant from a mobile station to the base station, wherein the request specifies one of a set of available classes of service; if a grant corresponding to the request is issued, transmitting data in the specified class according to the received grant; and if no grant corresponding to the request is issued, either transmitting data in the specified class in an autonomous mode or transmitting a subsequent request, or both.
47. (Original) The method of claim 46, further comprising monitoring one or more buffers, wherein each buffer is associated with one of the classes of service and, for each buffer, generating a corresponding request if a threshold amount of data is detected in the buffer.
48. (Original) The method of claim 47, further comprising specifying in the request the class of service associated with the buffer and the amount of data in the buffer.
49. (Original) The method of claim 47, further comprising specifying in the request a maximum supportable T/P ratio.

50. (Original) The method of claim 49, further comprising generating feedback while transmitting under a grant, wherein the feedback indicates changes in the maximum supportable T/P ratio.

51. (Canceled)

52. (Currently Amended) A method for a mobile station comprising transmitting a request for a grant from a the mobile station to a base station, wherein the request specifies one of a set of available classes of service;
if a grant corresponding to the request is issued by the base station, transmitting data on a reverse link to the base station in the specified class according to the received grant; and
~~if no grant corresponding to the request is issued, either transmitting data in the specified class in an autonomous mode or transmitting a subsequent request, or both.~~

53. (Original) The method of claim 52, further comprising monitoring one or more buffers, wherein each buffer is associated with one of the classes of service and, for each buffer, generating a corresponding request if a threshold amount of data is detected in the buffer.

54. (Original) The method of claim 53, further comprising specifying in the request the class of service associated with the buffer and the amount of data in the buffer.

55. (Original) The method of claim 53, further comprising specifying in the request a maximum supportable T/P ratio.

56. (Original) The method of claim 55, further comprising generating feedback while transmitting under a grant, wherein the feedback indicates changes in the maximum supportable T/P ratio.

57. (Canceled)